

**IN THE UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION**

SLOAN VALVE COMPANY,	)	
	)	
Plaintiff,	)	
	)	Case No. 10-cv-00204
v.	)	
	)	
ZURN INDUSTRIES, INC., and	)	
ZURN INDUSTRIES, LLC,	)	
	)	
Defendants.	)	

**MEMORANDUM OPINION AND ORDER**

AMY J. ST. EVE, District Court Judge:

Zurn Industries, Inc. (“Zurn”) has moved to exclude portions of the testimony of Sloan Valve Company’s (“Sloan”) employee-experts John Aykroyd, Jim Allen, and Bill Madison regarding Sloan’s alleged price erosion damages. For the reasons discussed below, the Court grants Zurn’s motion.

**BACKGROUND**

This is a patent infringement case involving U.S. Patent No. 7,607,635, entitled Flush Valve Handle Assembly Providing Dual Mode Operation (the “*Wilson* patent”). The *Wilson* patent “relates to flush valves for use with plumbing fixtures such as toilets, and more specifically to improvements in the bushing of the actuating handle assembly that will provide for user-selectable, dual mode operation of the flush valve.” (R. 314-1, *Wilson* patent, col.1, II. 6-10.) It provides a mechanism that allows a user to select one of two flush volumes based on the

direction of actuation of the handle: a full flush volume to evacuate solid waste from the bowl or a reduced flush volume to remove liquid waste. (*Id.*, col. 1, II 11-19, col.2, II. 27-33.)

Sloan filed this lawsuit against Zurn Industries, Inc. and Zurn Industries, LLC alleging infringement. During expert discovery, Sloan disclosed Richard Bero as its expert on the issue of compensatory damages. Sloan asked Mr. Bero to “determine damages in the form of a reasonable royalty and to quantify price erosion damages.” (R. 620-3, 4/5/2013 Bero Rebuttal Report, p. 3.) Mr. Bero opined that Sloan is entitled to a per-unit royalty rate of \$106 per Accused Product for a total of \$7.8 million. He further opined that Sloan incurred price erosion damages of approximately \$2.3 million for the period beginning after the complaint was filed. (*Id.*) Mr. Bero’s reasonable royalty rate calculation includes the profits Sloan would have made on (1) the sale of the patented manual dual flush valve packages and handles; (2) the sale of collateral products (*i.e.*, replacement diaphragm kits, urinal valves, and faucets); and (3) additional profits Sloan would have made by increasing its prices without Zurn’s presence in the market, which Bero calls the “price effect.” (Bero Rep. at 47-50; Bero Rebuttal Rep. at 55-57.) The table below breaks down the amount that Bero attributes to each category in reaching his \$141 price.

Component	2006 weighted profit	2006-2012 weighted profit
Product profit	\$35	\$28
Collateral profit	\$35	\$40
Price effect	\$71	\$92
<b>Total</b>	<b>\$141</b>	<b>\$160</b>
Note: Any minor differences are due to rounding.		

(Bero Rebuttal Rep. at 57.)

To calculate his price erosion damages and the “price effect,” Bero relied on the testimony of several Sloan employees who believed that Sloan would have sold its MDF valves at higher prices and at the same volume if Zurn had not been in the market. (Bero Rep. at 17-20, 48; 59-62.) Those employees upon whom Bero relied include John Aykroyd, Jim Allen, and Bill Madison. Sloan has disclosed Aykroyd, Allen, and Madison as employee experts pursuant to Fed. R. Civ. P. 26(a)(2)(C). (R. 696-1, Sloan’s Amended Disclosures Pursuant to Fed. R. Civ. P. 26(a)(2).)

Mr. Aykroyd has served as Sloan’s Vice President of Business Development since 2007. (R. 696, Sloan Resp. at 7.) Sloan identifies a number of opinions it expects Mr. Aykroyd to present at trial. The specific opinion that Zurn challenges is: “[b]ut for Zurn’s ability to offer its dual flush flushometer valves in competition with Sloan’s, Sloan could have and would have charged more for its manual dual flush flushometer valves and handles without any diminishing sales.” (R. 696-1 at 3.)

Mr. Allen is Sloan’s President and Chief Executive Officer. (Sloan Resp. at 4.) As with Mr. Aykroyd, Sloan identifies multiple opinions and facts it anticipates Mr. Allen will present at trial. The opinion that Zurn seeks to exclude is: “[b]ut for Zurn’s ability to offer its dual flush flushometer valves in competition with Sloan’s, Sloan could have and would have charged at least \$20 more for its manual dual flush flushometer valves and at least \$10 more for its manual dual flush handles.” (R. 696-1 at 7.)

Mr. Madison is Sloan’s National Sales Director. (Sloan Resp. at 9.) His opinion that Zurn challenges is: “Sloan would have sold the Uppercut Dual-Flush Valve at higher prices if Zurn had not been in the market.” (R. 696-1 at 9.)

## LEGAL STANDARD FOR DAUBERT MOTIONS

“The admissibility of expert testimony is governed by Federal Rule of Evidence 702 and the Supreme Court’s opinion in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S. Ct. 2786, 125 L. Ed. 2d 469 (1993).” *Lewis v. Citgo Petroleum Corp.*, 561 F.3d 698, 705 (7th Cir. 2009). Rule 702 provides, in relevant part, that “[i]f scientific, technical or other specialized knowledge will assist the trier of fact[,] . . . a witness qualified as an expert by knowledge, skill, experience, training or education, may testify thereto in the form of an opinion. . . .” *Id.* See also *Happel v. Walmart Stores, Inc.*, 602 F.3d 820, 824 (7th Cir. 2010).

Under the expert-testimony framework, courts perform the gatekeeping function of determining whether the expert testimony is both relevant and reliable prior to its admission at trial. See *id.*; *Power Integrations, Inc. v. Fairchild Semiconductor Intern., Inc.*, 711 F.3d 1348, 1373 (Fed. Cir. 2013); *United States v. Pansier*, 576 F.3d 726, 737 (7th Cir. 2009) (“To determine reliability, the court should consider the proposed expert’s full range of experience and training, as well as the methodology used to arrive [at] a particular conclusion.”). In doing so, courts “make the following inquiries before admitting expert testimony: first, the expert must be qualified as an expert by knowledge, skill, experience, training, or education; second, the proposed expert must assist the trier of fact in determining a relevant fact at issue in the case; third, the expert’s testimony must be based on sufficient facts or data and reliable principles and methods; and fourth, the expert must have reliably applied the principles and methods to the facts of the case.” *Lees v. Carthage College*, 714 F.3d 516, 521-22 (7th Cir. 2013); see also *Stollings v. Ryobi Tech., Inc.*, 725 F.3d 753, 765 (7th Cir. 2013); *Power Integrations*, 711 F.3d at 1373; *Pansier*, 576 F.3d at 737.

An expert may be qualified to render opinions based on experience alone. *See* 2000 Advisory Committee Notes to Rule 702. “[T]he text of Rule 702 expressly contemplates that an expert may be qualified on the basis of experience. In certain fields, experience is the predominant, if not the sole basis for a great deal of reliable expert testimony.” *Id.* In addition, the Committee Notes add:

If the witness is relying solely or primarily on experience, then the witness must explain how that experience leads to the conclusion reached, why that experience is a sufficient basis for the opinion, and how that experience is reliably applied to the facts. The trial court's gatekeeping function requires more than simply “taking the expert's word for it.”

(*Id.*)

The Seventh Circuit has repeatedly stated that “genuine expertise may be based on experience or training.” *United States v. Conn*, 297 F.3d 548, 556 (7th Cir. 2002) (quoting *Tyus v. Urban Search Mgmt.*, 102 F.3d 256, 263 (7th Cir. 1996)). “[W]hile extensive academic and practical expertise in an area is certainly sufficient to qualify a potential witness as an expert, Rule 702 specifically contemplates the admission of testimony by experts whose knowledge is based on experience.” *Trustees of Chicago Painters & Decorators Pension, Health & Welfare, & Deferred Sav. Plan Trust Funds v. Royal Int’l Drywall & Decorating, Inc.*, 493 F.3d 782, 787-88 (7th Cir. 2007) (citations and quotations omitted). As such, courts “consider a proposed expert’s full range of practical experience, as well as academic or technical training, when determining whether that expert is qualified to render an opinion in a given area.” *Id.* (quoting *Smith v. Ford Motor Co.*, 215 F.3d 713, 718 (7th Cir. 2000)).

In assessing the admissibility of an expert’s testimony, the Court’s focus “must be solely on principles and methodology, not on the conclusions they generate.” *Winters*, 498 F.3d at 742 (quoting *Chapman v. Maytag Corp.*, 297 F.3d 682, 687 (7th Cir. 2002)). *See also Stollings*, 725 F.3d at 765. “The goal of *Daubert* is to assure that experts employ the same ‘intellectual rigor’

in their courtroom testimony as would be employed by an expert in the relevant field.” *Jenkins v. Bartlett*, 487 F.3d 482, 489 (7th Cir. 2007) (quoting *Kumho Tire*, 526 U.S. 137, 152, 119 S. Ct. 1167, 143 L. Ed. 2d 238 (1999)). “A *Daubert* inquiry is not designed to have the district judge take the place of the jury to decide ultimate issues of credibility and accuracy.” *Lapsley v. Xtek, Inc.*, 689 F.3d 802, 805 (7th Cir. 2012).

## ANALYSIS

Zurn seeks to exclude the proposed opinion testimony of Aykroyd, Allen, and Madison on the grounds that they are not qualified to present the challenged opinions regarding price erosion and that they do not base these opinions on sound economic proof. The Court will address each proposed expert in turn.

### I. Price Erosion

As the Federal Circuit teaches:

Lost revenue caused by a reduction in the market price of a patented good due to infringement is a legitimate element of compensatory damages. Indeed, an infringer’s activities do more than divert sales to the infringer. They also depress the price [of the patented product]. Competition drives price toward marginal cost.

*Power Integrations, Inc. v. Fairchild Semiconductor Intern., Inc.*, 711 F.3d 1348, 1378 (Fed. Cir. 2013) (citations omitted). Accordingly, infringement damages can include both lost sales and any price reduction due to infringement. *Id.* The Federal Circuit therefore “recognize[s] the economic principle of ‘price erosion’ in calculating compensatory damages for patent infringement.” *Id.*

In order to prove price erosion damages, a patent owner must prove “that ‘but for’ infringement, it would have sold its product at higher prices.” *SynQor, Inc. v. Artesyn Techs., Inc.*, 709 F.3d 1365, 1381 (Fed. Cir. 2013), quoting *Crystal Semiconductor Corp. v. TriTech Microelectronics Int’l, Inc.*, 246 F.3d 1336, 1357 (Fed. Cir. 2001). In addition, “a credible but-

for analysis must account for the ‘effect of [a] higher price on demand for the product.’ *Id.*

“Further, because ‘a rational would-be infringer is likely to offer an acceptable noninfringing alternative, if available, to compete with the patent owner rather than leave the market altogether,’ the analysis must consider the impact of such alternate technologies on the market as a whole.” *Id.*, quoting *Grain Processing Corp. v. Am. Maize-Prods. Co.*, 185 F.3d 1341, 1350–51 (Fed.Cir. 1999). Further, “the patentee’s price erosion theory must account for the nature, or definition, of the market, similarities between any benchmark market and the market in which price erosion is alleged, and the effect of the hypothetically increased price on the likely number of sales at that price in the market.” *Id.* at 1357.

## **II. John Aykroyd**

Zurn challenges Mr. Aykroyd’s opinion that “[b]ut for Zurn’s ability to offer its dual flush flushometer valves in competition with Sloan’s, Sloan could have and would have charged more for its manual dual flush flushometer valves and handles without any diminishing sales.”

Mr. Aykroyd has a bachelor’s of science degree in industrial distribution from Texas A&M University. (R. 687-1, 10/22/12 Aykroyd Dep. Tr. at 9:1-7.) He does not have any educational background in economics and does not have any experience in conducting economic analyses. He has worked in the flush valve industry for six years. (R. 696, Sloan Resp. at 12.)

Sloan generally asserts that Mr. Aykroyd is qualified to offer his opinion because he has “years of pricing and sales experience in plumbing valves that sufficiently qualifies [him] to testify.” (*Id.* at 1.) Sloan, however, does not identify any specific experience Mr. Aykroyd has in pricing or selling plumbing valves, let alone in analyzing price erosion or determining the effect of a higher price on product demand. Rather, Sloan asserts that (1) he is aware that Sloan introduced a cheaper version of its MDF valve in 2007 “specifically to meet price pressure from

Zurn;” (2) he identified one specific instance where, due to price competition from Zurn, Sloan lowered its price on MDF valves to maintain its business with a client (the water district of New York City); (3) he testified that due to Zurn’s MDF valve, Sloan has had to charge less than the premium over its single flush valve that it originally planned to charge; (4) he testified that Sloan tracks market trends relating to pricing and sales; and (5) he expected “Sloan to have an advantage in the marketplace so people would pay more for the water savings that they would get using the product over a standard flush valve.” (*Id.* at 8-9) (internal citations omitted).

Zurn does not challenge any of this proffered testimony in the present *Daubert* motion. In fact, Zurn concedes that “Sloan’s employee-experts may be competent to testify about the hypothetical price Sloan wanted to charge for its MDFVs.” (R. 706, Zurn Rep. at 2.) Sloan, however, has not identified a sufficient basis for Mr. Aykroyd to opine that “Sloan could have and would have charged more for its MDF flushometer valves and handles without any diminishing sales.”

Mr. Aykroyd did not perform any economic studies to reach this opinion. (R. 687-1, 4/24/13 Aykroyd Dep. Tr. at 72:21-74:9) (admitting that he has not done any economic analysis or study of how the market would respond to a higher price and stating that he is not aware of anyone at Sloan who has conducted such an analysis or study.) The Federal Circuit has stated, “in a credible economic analysis, the patentee cannot show entitlement to a higher price divorced from the effect of that higher price on demand for the product. In other words, the patentee must also present evidence of the (presumably reduced) amount of product the patentee would have sold at the higher price.” *Crystal Semiconductor*, 246 F.3d at 1357. Despite his failure to conduct or rely on such an analysis, Mr. Aykroyd asserts that there would be no effect on consumer demand. He makes this assertion despite acknowledging that consumers could explore



alternatives to manual dual flush valves. (*Id.* at 121:6-16.) Thus, his opinion is not based on sufficient facts or a reliable methodology.

The facts that Sloan asserts in support of Mr. Aykroyd's opinion more appropriately address what Sloan intended to charge for its MDF valve, not what the market would bear. He may testify regarding Sloan's intended sales price, but he may not opine that customers would have paid that price without any diminishing sales.

### **III. Jim Allen**

Zurn challenges Mr. Allen's opinion that "[b]ut for Zurn's ability to offer its dual flush flushometer valves in competition with Sloan's, Sloan could have and would have charged at least \$20 more for its manual dual flush flushometer valves and at least \$10 more for its manual dual flush handles." As Zurn points out, it is not clear that Mr. Allen expressly opines that Sloan could have increased its price *and* seen no diminishing sales due to the price increase. The Court, however, agrees with Zurn that Sloan intends to use Mr. Allen's opinion to make that point. Mr. Bero, cites Mr. Allen for his assertion that "Sloan could have and would have been able to sell its Patented Products at higher prices of at least \$20 to \$30 per unit at the same approximate volumes it has sold its Patented Products." (R. 620-3, 4/5/2013 Bero Rebuttal Report at 60.) Further, Sloan's response brief contends, "Allen firmly believes that everyone who purchased Sloan's MDFVs and dual flush handles at the lower prices Sloan was forced to charge because of Zurn's infringement would have purchased those same Sloan MDFVs and dual flush handles at \$20 and \$10 premiums if Zurn had not introduced its infringing products." (Sloan Resp. at 7.)

Mr. Allen has a bachelor's degree in general studies from Columbia College. (R. 687-1, 11/12/10 Allen Dep. Tr. at 9:14-24.) Like Mr. Aykroyd, he has no educational background in

economics. (R. 687-2, 4/30/13 Allen Dep. Tr. at 7:12-21.) Mr. Allen has worked at Sloan for all of his professional life and he was the Sloan executive who, in 2005, set the initial price that Sloan intended to charge for its new MDF valves and handles. (Sloan Resp. at 4.) Sloan spends considerable time describing why Mr. Allen set the initial price for Sloan's MDF valve at \$99, which represented a \$20 premium over its price for single flush valves and a \$10 premium over its price for single flush handles. (*Id.* at 4-5.) Mr. Allen may testify about this initial pricing strategy. Indeed, Zurn does not challenge this testimony. Like Mr. Aykroyd, however, Mr. Allen provides no support for the assertion that Sloan would not have seen any reduction in sales at this intended premium price.

Sloan does not identify any economic study or analysis regarding the effect of a higher price on consumer's demand for Sloan's MDF valves. The only support Sloan presents is Mr. Allen's testimony that Sloan and Zurn are the two *primary* manufacturers of MDF valves<sup>1</sup>, and that Zurn's standard pricing was approximately 2-5% lower than Sloan's. (*Id.* at 6.) It appears that Mr. Allen bases his opinion on nothing more than his experience. (*See* 4/30/13 Allen Dep. Tr. at 98:1-19 ("I swear under oath that I believe with everything in my heart that" all of Zurn's customers would have bought the Sloan MDF valve at a \$20 premium.)) But Sloan has not identified any experience he has in analyzing price erosion damages or studying the effects of higher prices on consumer demand. The Court does not doubt Mr. Allen's conviction in his belief, but conviction alone cannot take the place of the reliable methodology that he lacks. *See United States v. Hall*, 165 F.3d 1095, 1102 (7th Cir. 1999) (finding that when considering expert testimony, a court "must rule out subjective belief or unsupported speculation"). The Court

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<sup>1</sup> Mr. Allen acknowledged that there are non-infringing alternatives to MDF valves, but asserted that they represented a "negligible" portion of the market. (4/30/13 Allen Dep. Tr. at 149-155.)

grants Zurn's motion to exclude Mr. Allen's testimony to the extent he seeks to opine that Sloan would have been able to charge its intended price premium without any decrease in sales.

#### **IV. Bill Madison**

Zurn challenges Bill Madison's opinion that "Sloan would have sold the Uppercut Dual-Flush Valve at higher prices if Zurn had not been in the market." Similar to Mr. Allen, it is not clear that Mr. Madison's opinion is that Sloan would not have lost any sales at the higher price it intended to charge, but it appears that Sloan intends to use his opinion for that purpose. (*See* Sloan Resp. at 11-12: "Messrs. Allen, Aykroyd, Madison, and Ballanco will testify that because of the lack of acceptable alternatives at anywhere near the price point of a MDFV, Sloan had intended to charge, and could have charged – and customers would have paid – higher prices for MDFVs if Zurn had not entered the market.")

Bill Madison has a bachelor's of science degree in marine engineering from the United States Merchant Marine Academy. (R. 687-2, 2/14/13 Madison Dep. Tr. at 6:17-21.) Sloan contends that he is qualified to render his opinion because he has almost two decades of experience selling Sloan plumbing products. (Sloan Resp. at 9.) Mr. Madison acknowledged that he did not conduct an economic study or analysis of the effect of pricing on consumer demand other than a general statement that he has "been studying [the buying decisions of the end users] for a long time." (*Id.* at 120:19-121:3.) Mr. Madison also admitted that alternative toilet valve options "would have affected the quantity of sale" of Sloan's MDF valves (*Id.* at 115:14-116:7.), and he agreed with the idea that he would need a study to determine the pricing effect of competitive products. (*Id.* at 118:11-22.) Further, Mr. Madison testified that he did not know the average sale price of Zurn's MDF valves. (*Id.* at 125:22-126:4.)


To the extent that Mr. Madison even employs a methodology in reaching his conclusion, it is unreliable and lacks adequate foundation. Further, he either lacks sufficient facts to make his determination (lack of knowledge regarding Zurn's average sales price) or his underlying knowledge runs counter to his conclusion (admission that alternative options would affect the quantity of Sloan's sales). As with Aykroyd and Allen, he may testify regarding what Sloan hoped to charge its customers for its MDF valve, but he may not opine that customers would have paid that price without any decrease in sales.

### **CONCLUSION**

For the reasons discussed above, the Court grants Zurn's Motion to Exclude Expert Testimony of John Aykroyd, Jim Allen, and Bill Madison Regarding Price Erosion Damages.

Dated: February 28, 2014

ENTERED:

A handwritten signature in black ink, appearing to read "Amy J. St. Eve". The signature is fluid and cursive, with the first name "Amy" being the most prominent.

AMY J. ST. EVE

United States District Court Judge